10. (Original) A laser as in Claim 1 and further comprising a tuning mirror.

REMARKS

As applicants stated in their December 15, 2002 response to the first Office Action, it appears that Examiner does not understand what Applicants are claiming. The confusion appears to result from Examiner's misinterpretation of Applicants' use of the terms "horizontal" and "vertical".

Therefore, Applicants have amended the first paragraph of the Description to include regular dictionary definitions of these terms. Since these are standard ordinary definitions the addition does not constitute new matter. To explain it more simply, when Applicants say the beam is expanded in the horizontal direction they mean the cross-section is wider and when it is expanded in the vertical direction it is taller.

With the definitions of horizontal and vertical cleared up, it should now be clear to Examiner that all of the referenced prior art provides for expansion only in the horizontal direction.

Thus, for example, contrary to Examiner's statement in the middle of page 2 of the subject Office Action, the second direction of beam expansions shown in Das (FIG.2) is not vertical. All of the beam expansion is in the horizontal direction. FIG. 2 is a view from the top of the laser system. In the FIG. 2 drawing, it is the horizontal width of the beam's cross-section which is being displayed. As stated on page 1 of the specification, the width of the beam exiting laser chamber 23 is about 3 mm and it is expanded in the horizontal direction 20X as described in Column 3, line 50. The beam is typically apertured in the horizontal direction to about 2.2 mm so that the horizontal cross-section of the beam is increased to about 44 mm. As stated also at page 1, the cross-section is about 20 mm at the laser exit. In the prior art, the beam was not expanded in the vertical direction. (The prior art drawings typically do not even show the vertical dimension since it is not changed.)

Expanding the beam in two directions is very difficult (compare FIG. 2 to FIG. 4C). Until

Applicants developed their two-direction expansion, two-direction expansion had never been attempted for these types of lasers (to the best of Applicants' knowledge). Applicants have shown tremendous benefits as a result of their two-direction expansion as explained in the specification they deserve a patent.

CONCLUSION

It is Applicants' belief that once the Examiner understands the meaning of the terms horizontal and vertical in the context of the beam cross-section, it will be clear that the present invention as presently claimed is not disclosed or suggested by the prior art. Therefore, Applications respectfully submit that all outstanding claims as presently amended should be allowable and request that the claims be allowed and that the application be allowed to issue as a patent.

The commissioner is authorized to charge any fees that may be required by the filing of this paper, or to credit any overpayment to Deposit Account No. 03-4060.

Respectfully submitted,

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